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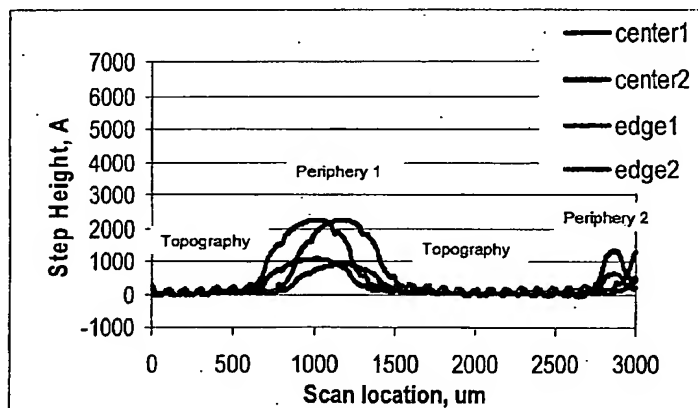
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(54) Title: PLANARIZATION FILMS FOR ADVANCED MICROELECTRONIC APPLICATIONS AND DEVICES AND METHODS OF PRODUCTION THEREOF



$\Delta$ Thickness max, topography-periphery = 230 nm

(57) Abstract: A planarization composition is disclosed herein that comprises: a) a structural constituent; and b) a solvent system, wherein the solvent system is compatible with the structural constituent and lowers the lower at least one of the intermolecular forces or surface forces components of the planarization composition. A film that includes this planarization composition is also disclosed. In addition, another planarization composition is disclosed herein that comprises: a) a cresol-based polymer compound; and b) a solvent system comprising at least one alcohol and at least one ether acetate-based solvent. A film that includes this planarization composition is also disclosed. A layered component is also disclosed herein that comprises: a) a substrate having a surface topography; and b) a planarization composition or a film such as those described herein,

wherein the composition is coupled to the substrate. Methods of forming a planarization compositions are also disclosed herein that comprise: a) providing a structural constituent; b) providing a solvent system, wherein the solvent system is compatible with the structural constituent and lowers at least one of the intermolecular forces or surface forces components of the planarization composition; and c) blending the structural constituent and the solvent system to form a planarization composition. Methods of forming a film are also disclosed that comprise: a) providing a planarization composition such as those disclosed herein; and b) evaporating at least part of the solvent system to form a film.

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